

**NC Department of Insurance
Office of the State Fire Marshal - Engineering Division
1202 Mail Service Center, Raleigh, NC 27699-1202
919-661-5880**

Duct Tightness Testing Requirement-Replacement Ductwork

Code: 2012 NC Energy Conservation Code
Section: 403.2.2

Date: February 4, 2013

Code: 2012 NC Residential Code
Section: N1103.2.2

Date: February 4, 2013

Question:

Are the duct tightness testing requirements of Section 403.2.2 required in existing buildings for replacement of existing ductwork?

Answer:

Yes, in cases where a replacement is so extensive that all the ductwork outside of the thermal envelope (per system) is replaced to the boots, then a duct tightness test is required.

Exception 2 to NC Energy Conservation Code 403.2.2 (reprinted below) clearly exempts partial system replacements or additions. Requiring a duct tightness test for extensive ductwork replacement as described above is consistent with the requirements for new construction, since only duct systems outside of the thermal envelope are required to be tested.

NCECC 403.2.2 & NCRC N1103.2.2 - Exception to testing requirements:

- 1. Duct systems or portions thereof inside the building thermal envelope shall not be required to be leak tested.*
- 2. Installation of a partial system as part of replacement, renovation or addition does not require a duct leakage test.*

Over the past year, several problems have arisen with baseboard registers and difficulties in sealing them or even reattaching ductwork to them; these have been handled on a case-by-case basis, and there may be other scenarios out there that you may come across over time that will also need to be evaluated on a case-by-case basis.

Keywords:

Ductblasting, ductblaster